

Year 4 Knowledge Organiser Computing – Data

What I should already know.

- Generate and compare different charts and graphs (using graphing software, database or spreadsheet) and understand that different graphs are used for different purposes.
- Create and use a branching database to organise and sort data to answer questions.
- Determine the data needed to answer a specific question; organise, present, analyse and interpret the data in tables, diagrams, tally charts, pictograms and bar charts, using ICT where appropriate.
- Begin to develop skills to identify clearly what data needs to be collected and design a questionnaire or use a input device (e.g. data logger) to aid its collection.

What will I know by the end of the unit?

- Use a spreadsheet to explore simple patterns (e.g. in a number square).
- Enter labels and numbers into a spreadsheet.
- Enter formulae into a spreadsheet and modify the data, (simple calculations + - × ÷).
- Use 'SUM' to calculate the total of a set of numbers in a range of cells.
- Identify and enter the correct formulae into cells, modify the data, make predictions of changes and test them.
- Copy formulae to create tables of results.
- Use a spreadsheet to draw a graph to help answer specific questions.

Key Vocabulary

Spreadsheet

Patterns

Formula

SUM

Cell

Graph

Online Safety

Be E-safe and enjoy!

Protect and secure



Be kind

Key Knowledge

- Know that ICT can create graphs that are used for different purposes and some are more appropriate and easier to read than others.
- Begin to understand that different programs (graphing, databases, spreadsheets) create graphs in different ways and are appropriate to different needs and purposes.
- Know and understand the difference between data and information.
- Understand which searches and graph types are relevant to specific problems and types of information.
- Understand that spreadsheets can automate functions, making it easier to test variables (e.g. when planning a budget you can change number of items and see the changed total cost).
- Understand that spreadsheets can be used to explore mathematical models.
- Understand the need for accuracy and frequent checking when entering formulae.
- Understand the possible consequences of inaccurate data or formulae.

Software



